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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **John Shanklin**

Serial No.: **10/017,145**

Group No. **1645**

Filed: **December 14, 2001**

For: **MUTANT FATTY ACID DESATURASE AND METHODS
FOR DIRECTED MUTAGENESIS**

Commissioner for Patents
Washington, D.C. 20231

Sir:

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. 1.56 and 1.97

Applicants submit herewith patents, publications or other information of which they are aware, which they believe may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR 1.56.

This Information Disclosure Statement is submitted under 37 CFR 1.97(b), or (within three months of filing application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last).

CERTIFICATE OF MAILING (37 CFR 1.8a)

I hereby certify that this paper (along with any papers referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

4/29/02
Date

Maria Pacella
Maria Pacella, Office of Intellectual Property and
Industrial Partnerships

The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made (37 CFR 1.56(g)), an admission that the information cited is, or is considered to be, material to patentability or that no other material information exists.

The filing of this Information Disclosure Statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

Applicants have attached hereto USPTO Form PTO-1449. Copies of cited references are enclosed except those of record in prior applications, U.S. Serial No. 09/233,856, and U.S. Serial No. 09/328,550 to which this application relates back for an earlier filing date under 35 U.S.C. § 120 and references that are not required to be submitted under Rule 98. The Examiner is requested to make these citations in the official record in this application.

I. Patents:

| <u>U.S. Patent No.</u> <u>Issue Date</u> | <u>Inventor(s)</u> | <u>Title</u> |
|---------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------|
| 5,512,793 4/30/96 | Stemmer | Enzymatic Inverse Polymerase Chain Reaction Library Mutagenesis |
| 5,514,568 | Stemmer | Enzymatic Inverse Polymerase Chain Reaction 5/7/96 |
| 5,605,793 2/25/97 | Stemmer | Methods for In Vitro Recombination |
| 5,811,238 9/22/98 | Stemmer, et al. | Methods for Generating Polynucleotides Having Desired Characteristics by Iterative Selection and Recombination |
| 5,830,721 11/3/98 | Stemmer, et al. | DNA Mutagenesis by Random Fragmentation and Reassembly |

I. Patents (continued):

U.S. Patent No.

| <u>Issue Date</u> | <u>Inventor(s)</u> | <u>Title</u> |
|-----------------------|--------------------|----------------------------------------------------------------------------------------------------|
| 5,834,250 11/10/98 | Wells, et al. | Method for Identifying Active Domains and Amino Acid Residues in Polypeptides and Hormone Variants |
| 5,837,458 11/17/98 | Minshull, et al. | Methods and Compositions for Cellular and Metabolic Engineering |
| 5,856,157 1/5/99 | Craig, et al. | " Δ^9 14:0-ACP Fatty Acid Desaturase and Gene Therefor" |
| 5,614,400 3/25/97 | Cahoon, et al. | "Methods and Compositions Relating to Plant Palmitoyl-Acyl Carrier Protein Desaturase" |

II. Publications:

1. Joo, et al., Nature 399: 670-673 (1999).
2. Mouratou, et al., J. of Biol. Chem. 274: 1320-1325 (1999).
3. Yano, et al., Proc. Natl. Acad. Sci. USA 95: 5511-5515 (1998).
4. Oue, et al., J. of Biol. Chem. 274: 2344-2349 (1999).
5. Ho, et al., Gene 77: 51-59 (1989).
6. Giver, et al., Proc. Natl. Acad. Sci. USA 95: 12809-12813 (1998).
7. Cahoon, et al., Proc. Natl. Acad. Sci. USA 97:12350-12355 (2000).
8. Whittle, et al., J. Biol. Chem. 276:21500-21505 (2001).

The agent who signs below is an individual associated with the filing and prosecution of this application (37 CFR 1.56(c)), and has prepared this Statement on the basis of the information supplied by the inventor(s), and the information in the attorney's file.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Christine Brakel', written in a cursive style.

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